INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/008215

CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ H01L27/092, H03D7/14, H04B1/30, H01L29/78, H01L21/336

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ H01L27/092, H03D7/14, H04B1/30, H01L29/78, H01L21/336

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2004

Jitsuyo Shinan Koho Kokai Jitsuyo Shinan Koho

1971-2004

Toroku Jitsuyo Shinan Koho

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C.	DOCUMENTS CONSIDERED	TO	BE	RELEV	/ANT
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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2002-118255 A (Toshiba Corp.), 19 April, 2002 (19.04.02), Full text; all drawings & US 2002/011612 A1 Full text; all drawings	1-11
Y	JP 8-264764 A (Toshiba Corp.), 11 October, 1996 (11.10.96), Par. Nos. [0018] to [0022]; Figs. 18 to 22 (Family: none)	1-11
Y	JP 2000-228611 A (Hitachi, Ltd.), 15 August, 2000 (15.08.00), Par. No. [0004]; Fig. 2 (Family: none)	1-11

×	Further documents are listed in the continuation of Box C.	See patent family annex.	
* "A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	_
"E" "L"	earlier application or patent but published on or after the international filing date document which may throw doubts on priority claim(s) or which is	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
"O" "P"	cited to establish the publication date of another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
	the priority date claimed	"&" document member of the same patent family	
	of the actual completion of the international search 06 August, 2004 (06.08.04)	Date of mailing of the international search report 24 August, 2004 (24.08.04)	
	and mailing address of the ISA/ Japanese Patent Office	Authorized officer	_

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Category*	Citation of document, with indication, where appropriate, of the releva	nt passages	Relevant to claim No.
Y	JP 2002-261097 A (Tadahiro OMI), 13 September, 2002 (13.09.02), Full text; all drawings & EP 1347506 A1 Full text; all drawings & WO 2002/054473 A1 & JP 2002-261091 & KR 3068570 A		4
Y	JP 11-55096 A (Fujitsu Ltd.), 26 February, 1999 (26.02.99), Par. No. [0027] (Family: none)		11
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